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### ΣΕΙΡΑ ΕΡΕΥΝΗΤΙΚΩΝ ΕΡΓΑΣΙΩΝ

**EUROPEAN INTEGRATION AND INDUSTRIAL  
STRUCTURE IN GREECE: PROSPECTS AND  
POSSIBILITIES FOR CONVERGENCE\***

**95 - 05**

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## EUROPEAN INTEGRATION AND INDUSTRIAL STRUCTURE IN GREECE: PROSPECTS AND POSSIBILITIES FOR CONVERGENCE\*

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George C. Petrakos\* and Spyros E. Zikos\*\*

### Abstract

This paper attempts to evaluate the prospects of Greece, a less advanced Southern European country, within the integrated European economy, examining the structural adjustments that have taken place in industry during the last two decades. We concentrate our attention on the performance of industrial branches, the regional performance and the performance of industrial firms by size. Our analysis indicates that the Greek industry has been unable to remove its structural weakness of the past and still maintains a strong orientation towards traditional branches, a spatially concentrated character and the most fragmented industrial base in Europe. Based on these findings we criticize existing and commonly held views about the process of integration and conclude that real economic convergence is for the near future unlikely and in any case cannot be achieved with the criteria of Maastricht.

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## **1. Introduction**

The European economic space has been going through a complex, often conflicting, but also rapid process of integration with major elements the operation of the single European market (SEM), the policies towards the economic and monetary union (EMU), the unification of Germany, the enlargement of the European Union (EU) and the westward orientation of Eastern and Central European (ECE) countries. This process involves states and regions with different levels of development, different endowments of resources, infrastructure and technology, and different rates of success in organizing efficiently their productive bases.

The great diversity with respect to economic, cultural and institutional characteristics that takes place in Europe, has often been confronted with skepticism and some times with enthusiasm. Nevertheless it is commonly agreed that a crucial question for the common European future is whether, under what conditions and to what extent, the process of integration among basically unequal partners has a converging or a diverging nature. Considering the fact that the Union has passed from a period of convergence and high growth that ended in the mid 1970s, to a period of divergence and low growth at both the national and the regional level afterwards (CEC 1991, Dunford and Perrons 1993), this question receives increasing attention.

Several studies have already indicated that the dynamics of this complex process of integration may have an overall unfavorable impact on the performance of the less developed states and regions of the European Union. In the first place, the operation of SEM through the simplification of border formalities, the harmonization of technical standards, the liberalization of financial services and the opening up of public procurement, will intensify competition among firms and regions and will strengthen the competitive advantages of the core regions that house the most efficient European enterprises (Amin et.al. 1992, CEC 1991). Also the elimination of trade barriers seems to alter the spatial behavior of large enterprises, reinforcing on a larger scale the importance of geographical factors such as distance, centrality or market accessibility and a more ordered spatial organization of activities at the European level. As a result, central regions and metropolitan areas will strengthen their position, benefiting from market size, agglomeration economies and changes in the strategic behavior of large European firms, while

intermediate regions can also have significant gains by offering similar advantages in a less congested and lower cost environment (CEC 1992). On the contrary, lagging behind regions will suffer directly from the impact of SEM, since they contain the highest share of sensitive sectors (CEC 1990, Camagni 1992), the weakest and most vulnerable productive base, insufficient infrastructure and an overall unfavorable geographical index for strategic location.

Second, the policies towards economic and monetary union (EMU), have a disproportionately adverse effect on the weaker member states and regions of the Community by largely depriving them from the means of fiscal policy that is necessary for the creation of modern infrastructure and the means of monetary and exchange rate policy that allows them to compete on a comparative advantage basis with the more efficient members of the EU (Camagni 1992). As a result less developed states are obliged to implement "convergence criteria" that seem to have a disproportionate effect and be in variance with the Commission's goal of social and economic cohesion. To the extent that the Maastricht treaty is not revised or extended, the peripheral states and regions of the Community may find themselves sliding towards a position of absolute disadvantage with respect to the set of multiple constraints within which they have to operate in their effort to actively intervene and reform their productive bases.

Third, the unification of Germany and the economic and political transformation of the ECE countries poses a potential threat to the less developed regions of the EC, through the diversion of public funds and mobile investment to the east and the direct competition from the labor intensive, low cost industries of these countries (CEC 1991, CEC 1993a).

Given that the process of integration itself is expected to have an overall unfavorable impact on the less developed areas of the EU, the important issue that has to be addressed is whether any parallel developments or policies capable to offset this impact exist at the European or national level. Clearly, in the antipode of these polarizing trends and dynamics, and largely because of them, we find the recently reformed and drastically upgraded and strengthened regional policy of the Commission (CEC 1991, CEC 1993d) emphasizing the provision of basic and economic infrastructure and the stimulation of indigenous potential in the lagging behind regions.



An equally important element that could work in favor of the less developed regions and become in fact a promising factor for the success of regional policy could be the existence of a visible trend of structural adjustments towards a modern and more competitive industrial base in these regions. Despite the increasing weight of the service sector in the output and the employment of most economies, its contribution to wealth and economic prosperity should not be overestimated, since its existence and growth is strongly bound to that of industry (Peschel 1992). As a result, industrial activity remains the basic determinant of the spatial distribution of economic development, which means that any signs of industrial restructuring in peripheral states and regions should be understood as an important first element in a (perhaps long) process of economic convergence.

The purpose of this paper is to examine the changes that have taken place in the industrial structure of Greece, a state classified by the European Commission as an Objective One area, assess the impact of existing policies and evaluate the prospects of the economy within the integrated European space and the policies necessary for the period of adjustment. As the discussion about the new Europe and the nature of changes expected in the spatial organization of activities is taking momentum, knowledge of the prospects, opportunities and constraints faced by the structurally weak countries will be in our view a useful contribution.

## **2. The structure of Greek industry**

The performance of the Greek economy in the post-war period has been discussed and analyzed in reports of international organizations such as OECD, IMF, EU as well as many scholarly papers and publications. Although in the 1960s Greece was placed second among the fastest growing OECD economies with an average GDP growth rate of about 7%, in the 1980s was ranked last among the EU economies with an average GDP growth rate of about 1.5% and a GDP per capita constantly diverging from the EU average. As a result of the collapse of the growth rate of output, the economy was unable in the 1980s to create sufficient numbers of new work positions, despite the huge expansion of the public sector. The unemployment rate increased from 2.8% in 1980 to 10.6% in 1995 exceeding that of the OECD countries and reaching the average rate of the EU (EC 1995).

Although available statistics and reports provide sufficient information about the internal and external macroeconomic imbalances of the economy, little attention has been paid to its structure and especially the structure of industry. Therefore we examine in this section the structural changes that have taken place in the Greek industry during the last 15-20 years giving an emphasis to the performance of the two digits ISIC branches, the regional performance and the performance of industrial firms by size.

#### *A. The Structure of Industrial Branches in Greece*

The post-1973 period has been a period of crisis for the Greek manufacturing. Although in the 60s the industrial activity was the vehicle of development, in the 70s and the 80s this dynamism has been exhausted. This is shown in the declining average annual growth rate of industrial production which from 10.1% in the 1961-1970 period fell to 6.9% in the 1971-1980, 1.0% in the 1981-1990, to become negative (-0.5%) in the 1991-1995 period (EC 1995). In the same direction the average annual growth rate of gross fixed capital formation declined from 9.3% in the 1961-1970 period to 2.8% in the 1971-1980 period, to become zero (0.0%) in the period 1981-1990 and slightly negative (-0.6%) in the period 1991-1995. As a result of these developments the share of manufacturing in GNP has declined from 21.3% in 1980 to 16.7% in 1993, which compared to an average EU share of about 23%, indicates the declining competitiveness of the Greek industry. This is clearly expressed both domestically with the rapid increase of imports and internationally with the sluggish performance of exports (Giannitsis 1984). Especially after its accession, import penetration from the EU has doubled, while the share of manufacturing output that is exported to the EU has hardly grown at all (CEC 1993c).

The crisis of Greek manufacturing in the post-1973 period is also expressed with a shift of investment and employment towards traditional activities and a contraction of the already weak and undeveloped intermediate and capital goods sector. As it can be estimated from Table 1, in the period 1963-1973 the intermediate and capital goods branches (30 - 38) increased their employment with higher rates than the consumption branches (20 - 29), creating in this period 85,335 new employment positions compared to 43,217 new positions in the consumption goods branches.

**Table 1 Employment in Greek Industry by branch (1963-1988)**

ISIC branch	Number of employees			Composition of employment per branch			Percentage change		
	1963	1973	1988	1963	1973	1988	1963/1973	1973/1988	1963/1988
20	76443	89285	104307	16,21	14,78	14,77	16,80	16,82	36,45
21	8556	12307	13530	1,81	2,04	1,92	43,84	9,94	58,13
22	16959	9049	12895	3,60	1,50	1,83	-46,64	42,50	-23,96
23	55916	68419	66403	11,86	11,33	9,40	22,36	-2,95	18,75
24	71358	72030	116924	15,13	11,92	16,55	0,94	62,33	63,86
25	28495	34406	30949	6,04	5,70	4,38	20,74	-10,05	8,61
26	21685	29445	30467	4,60	4,87	4,31	35,79	3,47	40,50
27	6135	7971	12011	1,30	1,32	1,70	29,93	50,68	95,78
28	13227	15963	22621	2,80	2,64	3,20	20,68	41,71	71,02
29	9945	13061	12018	2,11	2,16	1,70	31,33	-7,99	20,84
30	7938	15832	19296	1,68	2,62	2,73	99,45	21,88	143,08
31	12584	20255	27768	2,67	3,35	3,93	60,96	37,09	120,66
32	1378	3765	7483	0,29	0,62	1,06	173,22	98,75	443,03
33	28089	37465	37848	5,96	6,20	5,36	33,38	1,02	34,74
34	2287	7859	10418	0,48	1,30	1,47	243,64	32,56	355,53
35	38658	47850	47081	8,20	7,92	6,67	23,78	-1,61	21,79
36	15556	23697	22320	3,30	3,92	3,16	52,33	-5,81	43,48
37	13589	30473	28424	2,88	5,04	4,02	124,25	-6,72	109,17
38	34581	52808	69650	7,33	8,74	9,86	52,71	31,89	101,41
39	8185	12102	13893	1,74	2,00	1,97	47,86	14,80	69,74
20-39	471564	604042	706306	100,00	100,00	100,00	28,09	16,93	49,78

Source NSSG, Surveys of Industry for the years of 1963,1973,1988

On the contrary, in the period 1973-1988 Greek industry experienced a retreat of the intermediate and capital goods branches and a return to traditional activities and the consumption goods branches. In this period the consumption branches increased their employment by 70,189 new positions while the capital and intermediate goods branches created only 30,284 new positions. It is ironic that the return of Greek Industry to traditional activities and branches that characterize early stages of development took place in a period where domestic demand, because of improvements in the standards of living, moves away from the old consumption patterns. At the same time in the international markets traditional industries shift towards Developing countries that appear to have significant comparative advantages and compete for a larger share of the market (Giannitsis 1985). This orientation of Greek industry towards traditional branches has been, as Table 1 shows, a structural weakness of the past, which however has been intensified after the 1973 crisis. In that respect Greece, compared to the other countries of the European South, has the closest proximity to industrial structures characterizing the old international division of labor (Lipietz 1987 , Getimis and Economou 1992).

## ***B. The Regional Structure of Greek Industry***

Industrial employment and change between the four survey years (1973, 1978, 1984, 1988) with available data at a regional level is given in Table 2. The major characteristic of the period 1973-1988 is that industrial employment is to a very large extent spatially concentrated in the two major regions of Attica and Central Macedonia which accounted for almost 65% of national industrial employment and 57% of the number of firms of the country in 1988. Within these two regions only two prefectures, those of Attica and Thessaloniki, concentrated 53% of total industrial employment. Attica itself accounted for over 42% of industrial employment in 1988 (from 51% in 1973) maintaining to a large extent its dominant position in Greek manufacturing.

Examining the various subperiods we observe that the 1973-1984 one is characterized by important structural changes at the regional level associated with a decline of the relative weight of the core region of Attica and the dispersion of industrial activity to the rest of the country and especially along the axis Athens-Thessaloniki. Despite that, however, the island regions (Ionian, North and South Aegean) seem to be unable to benefit from this development, basically because of the constraints imposed on them by high transportation cost (Economou 1990).



In the period 1984-1988 however, the dispersion trend of the previous period seems to be weakened if not reversed, since the region of Attica and especially that of Central Macedonia experienced a significant increase in industrial employment. A similar increase was also reported for the peripheral regions of East Macedonia & Thrace and Crete, which is however attributed especially in the first case to the regional incentives and development policies adopted at National and EU level. In that respect, employment growth in these regions does not have an indigenous character and it is questionable whether it can be sustained under a less assisted economic environment.



Table 2 Regional structure of industrial employment (1973-1988)

	Industrial employment 1973-1988				Percentage change				Regional composition of employment			
	1973	1978	1984	1988	1973/84	1978/84	1984/88	1973/88	1973	1978	1984	1988
Total Greece	604042	671492	684145	706308	13,26	1,88	3,24	16,93	100,00	100,00	100,00	100,00
Attica	312638	327779	292509	298277	-6,44	-10,76	1,97	-4,59	51,76	48,81	42,76	42,23
Central Greece	31315	40229	46972	44393	50,00	16,76	-5,49	41,76	5,18	5,99	6,87	6,29
W.Greece	27168	31808	34042	31905	25,30	7,02	-6,28	17,44	4,50	4,74	4,98	4,52
Peloponnese	23243	26056	26190	25871	12,68	0,51	-1,22	11,31	3,85	3,88	3,83	3,66
Ionian Islands	5538	5248	5422	5267	-2,09	3,32	-2,86	-4,89	0,92	0,78	0,79	0,75
Epirus	9538	10350	12417	11992	30,18	19,97	-3,42	25,73	1,58	1,54	1,81	1,70
Thessaly	32246	37570	40616	41246	25,96	8,11	1,55	27,91	5,34	5,60	5,94	5,84
W.Macedonia	15706	17384	20017	19641	27,45	15,15	-1,88	25,05	2,60	2,59	2,93	2,78
Centr.Macedonia	96230	117993	139480	155669	44,94	18,21	11,61	61,77	15,93	17,57	20,39	22,04
E.Macedonia Thrace	16680	25451	32552	37463	95,16	27,90	15,09	124,60	2,76	3,79	4,76	5,30
N.Aegean	7639	6310	6628	6181	-13,23	5,04	-6,74	-19,09	1,26	0,94	0,97	0,88
S.Aegean	8719	7414	9169	8663	5,16	23,67	-5,52	-0,64	1,44	1,10	1,34	1,23
Crete	17385	17900	18131	19739	4,29	1,29	8,87	13,54	2,88	2,67	2,65	2,79

Source NSSG, Surveys of Industry for the years of 1973, 1978, 1984, 1988

The trend of the last period indicates that despite the implementation of regional development policies, from the mid 1980s industrial growth tends to resume again a polarized pattern of spatial distribution. These findings are in line with a recent time-series estimate of the degree of the metropolitan concentration in Greece, showing a disruption in the mid 1980s of the deconcentration trend that started in the late 1970s (Petrakos and Kotzamanis 1993). They also provide evidence in support of those reports indicating that the gradual elimination of barriers among EC countries will give rise to forces of polarization and strengthen the dominance of central regions and metropolitan areas (CEC 1991, Amin et. al. 1992, Camagni 1992). Despite the fact that agglomeration economies for industry have been exhausted in the metropolitan area (Petrakos and Tsoukalas 1994), the administrative structure, the process of tetriarization of the economy and the strategic position in the domestic transportation network seem to give Athens and the core region of Attica a locational advantage.

Typically, the most advanced firms of dynamic industries that operate in an inter-regional or national market are concentrated in the central regions or the regions of the development axis, while the perimetric zone is mainly restricted to a local and rural character small industry production which is also confronted with the pressure of dynamic region industries attempting to penetrate their markets (Hadjimichalis and Vaiou 1988). Therefore, at this phase any support programs for the perimetric zone that do not provide the means for structural adjustments are very likely to result, through unfavorable interregional expenditure multipliers, to an indirect stimulus for further development of the central regions.

### *C. Industrial Structure and Firm Size in Greece*

In Table 3 we provide data about the number of firms in the Greek industry for the 1973-1988 period by size. It becomes obvious from the beginning that industrial activity in Greece takes place in very small by international standards production units. We observe that in 1988, 93.5% of industrial firms employed 1-9 persons being classified as light manufacturing or handicraft units<sup>1</sup>. We also see that this share remains unchanged for the entire period 1973-1988. The total number of industrial firms in this period increased by 19.25% but this change is attributed to the creation of new small scale enterprises and especially those with the smaller size (1-9 employees). As a result the average size of firms has remained unchanged for the entire period to the very small figure of 4.8 employees per firm which is the lowest in Europe since the average size of industrial firms in the EU is 18 employees per firm (Petrakos 1995c, EC 1994). Thus the problem of fragmentation of production in Greek manufacturing remains, since the increase in demand seems to be met with the creation of new small family firms while the expansion or the merging of existing firms is slow or stalled. Given this structure of industry, Greece maintains the most fragmented production base among the European countries.

Table 3 Number of firms in Greek Industry by size (1973-1988)

Size	Number of firms				Composition by size				Percentage change			
	1973	1978	1984	1988	1973	1978	1984	1988	1973/78	1978/84	1984/88	1973/88
1-9 pers	113479	120321	135666	135327	93,51	93,28	93,91	93,51	6,03	12,75	-0,25	19,25
10-49 »	6667	7139	7378	7935	5,49	5,53	5,11	5,48	7,08	3,35	7,55	19,02
1-49 »	120146	127460	143044	143262	99,00	98,82	99,02	98,99	6,09	12,23	0,15	19,24
50+ »	1211	1528	1419	1455	1,00	1,18	0,98	1,01	26,18	-7,13	2,54	20,15
Total	121357	128988	144463	144717	100,00	100,00	100,00	100,00	6,29	12,00	0,18	19,25

Source NSSG, Surveys of Industry for the years of 1973, 1978, 1984, 1988

Looking at Table 4 we see that in the same period (1973-1988) employment in manufacturing increased by 16.93%. This change is again attributed to the increase of employment by small scale firms and especially those employing 1-9 persons. On the contrary, large firms employing more than 50 persons after an increase in employment in the period 1973-1978, are faced with significant reductions in work positions. In fact this reductions would have been much greater if one counts the number of industrial rescues undertaken by the State, in order to avoid the social cost of unemployment. Comparing the figures of Tables 3 and 4 with data from other European countries we see that in Greece the share of small industry (1-49 employees) is much greater<sup>2</sup>. Note here that in Greece the category of firms employing 1-49 persons has a very unbalanced distribution, dominated by small firms with an average size of a little more

than 3 employees (Table 5). This is explained by the disproportionate weight of family firms that either employ 1-2 persons (usually owner plus spouse) and account for 45% of the total number of industrial firms, or employ 1-4 persons (in most cases the entire family) and account for 85% of the total number of firms.

Table 4 Number of employees in Greek Industry, by size (1973-1988)

Size	Number of employees				Composition of employment by size				Percentage change			
	1973	1978	1984	1988	1973	1978	1984	1988	1973/78	1978/84	1984/88	1973/88
1-9 pers	254905	264140	293868	301468	42,20	39,34	42,95	42,68	3,62	11,25	2,59	18,27
10-49 »	127454	139174	141058	151955	21,10	20,73	20,62	21,51	9,20	1,35	7,73	19,22
1-49 »	382359	403314	434926	453423	63,30	60,06	63,57	64,20	5,48	7,84	4,25	18,59
50+ »	221683	268183	249220	252884	36,70	39,94	36,43	35,80	20,98	-7,07	1,47	14,07
Total	604042	671497	684146	706307	100,00	100,00	100,00	100,00	11,17	1,88	3,24	16,93

Source NSSG, Surveys of Industry for the years of 1973, 1978, 1984, 1988

Table 5 Average Firm Size in Greek Industry (1973-1988)

Size	1973	1978	1984	1988
1-9 pers	2,25	2,20	2,17	2,23
10-49 »	19,12	19,49	19,12	19,15
1-49 »	3,18	3,16	3,04	3,16
50+ »	183,06	175,51	175,63	173,80
Total	4,98	5,21	4,74	4,88

Source Tables 3,4

Examining the developments that took place in industrial employment in the post 1973 period we see that small industry shows a significant ability to adjust and survive recessions and demand variations that is not found in its large counterpart. This finding is consistent with the increasing international recognition of the importance of flexibility and adaptiveness of small firms in a changing economic environment. Recent empirical studies (Hadjimichalis and Vaiou 1987, Andrikopoulou 1987, Lyberaki 1988) have found that small firms are more flexible and more adoptive, having a better record with respect to employment, investment, loan burden, and effectiveness compared to large firms.

These findings however should be used with care since they do not justify any kind of optimistic scenario about the future of Greek industry. They should rather be taken as a warning to those considering small firms as a residual of the past, a confirmation that they are active participants of the economy and that their potentials should not be underestimated (Lyberaki 1988). It is however doubtful whether small industry is able to steer by itself the kind of restructuring and the technological upgrading that is necessary for industrial development in Greece.

Flexibility and adaptiveness do not seem to be oriented towards dynamic markets, product differentiation or quality improvements, but rather to activities of secondary importance. According to the statistics of the 1984 survey of industry, from the 15,504 new small firms of size 1-9 employees 6,076 were in car repair, 1,362 in wood processing, 1,167 in metal products and 1,099 were in electric appliances service and repair. With these facts, it is questionable whether small firms are able to seriously assist in the restructuring of the productive base of the economy, especially when flexibility during the business cycles seems to be associated with the contraction or expansion of family employment in order to meet the variations in demand (Hadjimichalis and Vaiou 1990, Petrakos et. al. 1991).

### **3. Prospects and possibilities for convergence**

Given the major characteristics of industry presented in the previous section and the fact that the performance of industry is decisive for the future of Greece in the European economy we cannot be optimistic. We do not observe any significant signs indicating that structural deficiencies have been in a process to be removed and that a new paradigm of development is emerging. Even worse, recent studies show the impact of EU membership on industrial output to be negative for most industrial branches (Petrakos and Zikos 1991) and that the elimination of trade barriers will seriously affect most labor-intensive sectors protected to a relatively higher degree than the insignificant in terms of output capital-intensive sectors (CEC 1990, Hassid and Katsos 1992).

Based on the analysis of the structure of Greek industry, some commonly held views about the performance of peripheral States and the process of integration may be found to be unjustified. First, there is a perception about Greece as being a special case of failure in the EU usually associated with the policies of the 80s. Although Greece as a country is considered to be an extreme case of structural weakness within the EU, the fact is that at the EU regional level there are many large or small areas (some with the size of Greece) having similar characteristics with the Greek average. Almost all the Objective One Regions (OIRs) of the Union have the same or greater difficulties to restructure their industrial bases and are equally threatened by the forces of SEM and EMU. What makes however Greece really a special case within these regions is



its overall unfavorable geographical position with respect to the other members of the European Union.

In a single European market, factors such as distance, lack of adjacency, and limited accessibility to the European development center, although rarely mentioned, play a very important role in the prospects of the country for growth and development. Under a more protected and fragmented economic environment, national markets maintained a significant degree of independence and the location choices of firms had a greater spread in order to overcome trade barriers. The elimination however of barriers and the unification of markets, altered previous locational needs and patterns, highlighting the significance of the geographical characteristics of regions and making centrality and accessibility at the European level a decisive factor. Rosenblat and Pumain (1993) have found that multinational enterprises in Europe but also their subsidiaries, follow such a location pattern that favor by far the core areas of the EU. A simple European level gravity index is found to explain 65% of this location pattern. A similar gravity index is also found by Petrakos (1995a) to have a correlation coefficient of over 90% with the level of GDP, industrial product and total exports of the European countries. That implies that less strategic and perimetric locations with respect to the European gravity center are bound, to a certain extent, to lead to peripheral and inferior economic structures independently from the success or failure of domestic policies. Distance may also explain why Greece and Ireland are the only European countries that despite market unification and the experience of the other countries continue to maintain a very low share of intra-industry trade<sup>3</sup> and tend to undertake at the European level an inter-industry specialization. An inter-industry type of specialization and economic relations however, implies a geographically divided pattern of integration, with the more advanced economies specializing in technology, capital or knowledge intensive goods and the less advanced in labor intensive and assembly activities.

A second commonly met, but unjustified in our opinion view, is that if all countries abide with the Maastricht criteria of strict macroeconomic management then economic convergence will take place. Although macroeconomic stabilization policies are necessary, there is not any known mechanism based on monetary policies that will convert structurally weak and less developed economies to healthy ones. On the contrary there are fears that the deprivation of fiscal, monetary and exchange rates tools will put these



economies in a more disadvantaged situation with respect to their economic and social infrastructure as well as their competitive position towards more efficient countries in the international markets. Thus, even if nominal convergence is achieved this will not imply that real convergence will follow. The structural problems of the Greek industry with respect to its orientation, composition, size and regional bias will not be removed by a more balanced macroeconomic environment. The latter may stimulate the expansion of output, as it is expected to do, but this will be an expansion of the same type, a replication of existing patterns of production that reproduce structural deficiencies on a larger scale. As a result, it is easier to conceive how real convergence will lead to a nominal Maastricht-type convergence than the opposite. Real convergence, which remains the goal, depends more on structural adjustment policies, technological diffusion, access to information and a favorable institutional environment that are not central in the logic of Maastricht.

Third, there is in our opinion a fallacy related with the belief that the regional and structural policies of the EU have a temporary character and will be terminated with the completion of the second stage of the EMU. Regional policies however in the form of assistance to less developed regions and regions in crisis, should be seen as a permanent ingredient of the new Europe for a number of reasons. Despite strong neo-classical expectations for the opposite, regional disparities will increase as a result of integration and will further increase with the next enlargement of the EU with Central and Eastern European countries at least for the foreseeable future (Petrakos 1995). As a result, regional policies will be necessary to offset largely destabilizing and undesired population flows that will be impossible to administratively deter in a single market. In addition, regional policies will be the necessary counterbalancing force to sectoral, R&D and "excellence" policies supporting large and efficient enterprises in the advanced regions of the Union, in an effort to create "European champions" that will effectively compete against US and Japanese firms in world markets. In the absence of regional policies it will be really difficult to maintain huge sectoral programs in information technologies, aerospace, etc. that favor exclusively the largest and most efficient European firms, located in the more dynamic and prosperous regions. Also, to the extent that social stability is a pre-condition for the realization of the benefits of economic integration, support to the less developed areas of the EU should not be seen as a luxury. The possible marginalization of these regions

will generate tensions and conflicts that will undermine in the long-run the vision of the common European future. Finally, the deprivation of less developed countries from the domestic fiscal and monetary means of intervention should be replaced at a higher level as it becomes clear that weak states and regions cannot compete the advanced ones with existing deficiencies in social and economic infrastructure. This requires a federal-type EU budget to fill the gap created by the Maastricht treaty, if a further increase in disparities is to be avoided. All this leads to a totally different attitude towards the necessity of the EU regional policy, implying that it has to be seen as a permanent ingredient of the integration process.

Taking all problems and difficulties into consideration, what should we expect to be the future of weak and peripheral regions of the EU and what their real prospects for convergence? First, we have to entirely disagree with the view that, on the basis of the difficulties of integration among unequal partners, questions the merits of being a member of the EU. Critical views of this type, based on the observations made above, have often argued that the process of integration has an inherently dividing character and that less developed States should maintain their independence and defer membership. In a world that shrinks down to 3-4 trading blocks this is a very short sighted and dangerous proposition, especially for small countries in unstable regions. It is true that disparities in the EU will stay high and real convergence will take long time, if it is ever completed. It is also true however that protectionism and isolation in today's world cannot be the answer. Between large trading blocks there is no much space for single riders and definitely the benefits of membership are much broader than economic ones.

In building a common European future, we have to look at the root of the problems of the peripheral regions. Behind huge deficits and debts - that are the target of the Maastricht criteria and monopolize the attention and the discussion- one should be able to distinguish the structural weakness of the economy of these regions and especially the structural weakness of industry. Usually what we see behind huge public deficits is a wasteful and overcrowded state and self-serving politicians hiring in life-time jobs their loyal voters. Although this picture may not be far away from reality, it does not touch the essence of the problem. If the public sector is so attractive, why the political system in US, Germany or Japan does not receive similar pressures for a public sector job? Simply because there is no need for that. The private sector in

advanced industrial countries has been able to absorb to a large extent the expansion of urban labor force. On the contrary, in Greece and perhaps in other peripheral states, the process of economic transformation which continued in the 1970s and early 1980s, releasing surplus labor from the rural areas, coincided with the intensification of the structural weakness of the industrial sector and its difficulty to improve efficiency and expand output and employment. Clearly then macroeconomic imbalances have their roots in the weak structure of the economy (that 'demanded' a more interventionist approach) and it will be difficult, if not impossible, to eliminate them without the assistance of structural policies.

As a result, EU regional and structural policies have to be maintained along with other national initiatives and institutional arrangements, in order to facilitate the efforts of emerging social partnerships at local and national level to pursue development and restructuring strategies based on their special characteristics, comparative advantages, creativity and resource potentials. Given the small size of industrial units in Greece, the paradigm of "Third Italy" appears to be a much more suitable development strategy than the large scale massive production modes of Western Europe. In that respect, the support of local small industry institutions and community service centers facilitating information flows, technology transfers, product design assistance, R&D cost sharing, co-operation with Universities and training is essential. These institutions participating into regional, national or even international networks can maintain and transmit to local productive bases the high level of knowledge required to survive in a world of unstable markets and rapid technological change. They can also be used as a vehicle for the Balkan strategy of Greek firms, especially the small and peripherally sited ones. This Balkan strategy, is a necessary development dictated by the intolerably long distance of Greece from the Western European gravity center. In fact, under certain conditions it could be a successful positive response to unification, that attempts to convert peripherality at the European level to centrality at a sub-european level, by promoting a regional Balkan market in which Greece by definition has a increasing role. Attempting the creation of a peripheral growth pole in the Balkan peninsula while at the same time integrating with the other countries of the EU and perhaps serving as a link of Western Europe with the emerging markets in the Balkans and the East Mediterranean basin, may be the best strategic response to the challenges and the problems lying ahead.

## Endnotes

1. In Greece the distinction of industrial enterprises into small, medium and large is based on the size of the employment. More specifically small are considered those with 1-9 employees, medium those with 10-49 and large those with over 50 employees.
2. In the EU countries, the contribution to employment of firms with a size smaller than 10 persons was in 1990 15.9% in Germany, 42.5% in Italy, 27.1% in England, 28.3% in Denmark, 16.9% in Belgium, 24.3% in Portugal and 22.0% in France (EC 1994) , while in Greece it is 42.7% (1988). That implies that the role of small industry in maintaining and expanding industrial employment levels in Greece is decisive.
3. For Ireland see Grimwade (1989). For Greece, Petrakos (1995b) has estimated figures of intra-industry trade ratios with the EU on the basis of the 9 one-digit ISIC sectors for the period 1989-1993 and found that they range from 49% to 57% with no increasing trend.

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